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From: Phyllis Pei, Division Director

Date:

Subject: Annual Review and Update of Division ISM Plan

The Division ISM Plan was reviewed, with the following changes:

- Responsibility and Accountability updated
- Qualification and Training updated
- EH&S Resources updated
- Organizational Chart updated
- Division Work Activities and Hazard Levels updated
- List of Authorizations updated
- Division Safety Committee members updated

Phyllis Pei
EH&S Division Director

Date: _____

John Chernowski
Division Safety Coordinator

Date: _____

Environment, Health and Safety Division



Integrated Safety Management Plan

Original: May, 1998

Rev 1: Sept, 1999	Rev 6: Dec, 2004		
Rev 2: Oct, 2000			
Rev 3: Oct, 2001			
Rev 4: Oct, 2002			
Rev 5: Oct, 2003			

Environment Health and Safety Division Integrated Safety Management Plan

1.0 Preamble

The EH&S Division Integrated Safety Management Plan is the guiding document to implement Integrated Safety Management System (ISM) for division work activities. ISM, taken from DOE Order 450.4, Safety Management Systems Policy, sets forth the seven guiding principles and the five core functions that enable work to be conducted safely within the Division.

The Laboratory's ES&H policies and requirements are established in the Regulations and Procedures Manual (RPM), Health and Safety Manual (PUB-3000), the Operating and Assurance Plan (OAP), the Work Smart Standards or Appendix F of the University's contract with the DOE, and the Self Assessment Manual (PUB-3105). These publications establish line management responsibilities and define the conditions and requirements to conduct work at the Lab. The Integrated Safety Management Plan, herein referred to as the Plan, uses the institutional Environment, Safety and Health policies and procedures to ensure that all EH&S Division personnel are adhering to the principles and functions of ISM. Annually the Plan will be reviewed and revised as necessary.

2.0 Responsibility and Accountability

EH&S Division Director, group leaders, other formal supervisors, team leaders, and individual workers are expected to define work, identify hazards, implement controls, perform work safely, and provide feedback and continuous improvement as appropriate.

2.1 Division Director, Group Leaders

All group leaders are responsible for:

1. Assuring ES&H requirements are integrated into work activities and the necessary resources/controls are provided in a timely manner to do work safely and in accordance with all Laboratory ES&H requirements.
2. Creating meaningful staff ES&H expectations and holding staff accountable in annual performance appraisals.
3. Identifying the ES&H training requirements for their employees, guests, visitors, students, and matrixed employees and ensuring such training is completed and documented.
4. Conducting periodic safety walkthroughs of staff workspace to ensure adequate administrative and engineering controls are in place to manage hazards. Line managers will increase frequency of inspections in locations of past safety system failures.
5. Performing semiannual ergonomic surveys of staff to monitor for changes (i.e. workload and other conditions) that may create ergonomic hazards.
6. Meeting with each employee supervised and, when appropriate, observing physical work activities. Supervisors and staff should use these interactions to identify safety hazards and corresponding mitigation measures.
7. Ensuring that new or significantly modified projects and facilities are reviewed for hazards in the planning stage.

8. Annually documenting in the HEAR database: 1) hazards inherent in self-authorized work and 2) reviews of formal authorizations.
9. Tracking ES&H deficiencies in the Laboratory Corrective Action Tracking System (LCATS). Ensure findings are resolved in a timely manner.
10. Conducting periodic safety meetings, either as part of routine group meetings or as dedicated safety meetings. Review the Lessons Learned website for applicable subject matter.
11. Designating a group representative to the Division Safety Committee. Each group must have a representative present at monthly Safety Committee meetings.

These responsibilities cannot be delegated.

2.2 Formal Supervisors

EH&S Division supervisory personnel must ensure that all employees, students, participating guests, visitors, and subcontractors know, understand, and follow applicable safety requirements. They are expected to work safely and to cooperate with the Division ES&H efforts. If there is any question about the safety or environmental impact of an activity, work should be stopped and issues resolved before proceeding.

2.2.1 Contractors

The LBNL ISM Plan requires the Occupational Safety Group to review the Injury and Illness Prevention Program of contractors with ten or more employees onsite at any one time. As the EH&S Division employs contractors with ten or more contractors onsite at any one time (e.g. Barton Security and Alameda County Fire Department), respective EH&S Division supervisors must assure this review is completed.

2.2.2 Matrixed Staff

Matrixed employees' supervisors from the home divisions or departments retain all health and safety responsibilities pertaining to matrixed employees, except where some of the responsibilities have been transferred to the host division or department through a formal Memorandum of Understanding (MOU). When applicable, home and host supervisors are to identify their responsibilities for employee safety in the MOU. (RPM 7.01.D for details.)

2.2.3 Students

ISM does not distinguish between students and other personnel working at LBNL. Students are afforded the same protections and assume the same obligations as any LBNL employee or guest for safe work practices.

Before work begins, supervisors are responsible for assuring each student possesses a thorough understanding of safe work practices. Supervisors are responsible for assuring each student completes a Job Hazard Questionnaire (JHQ), EHS010 (New Employee Orientation), and performs work in accordance with RPM 7.01.C.

Supervisors and mentors of students participating in the CSEE program will execute an MOU with CSEE that clarifies the responsibilities of supervisors, mentors, students, and CSEE personnel.

2.3 Division Staff

All Division employees are responsible for conducting themselves in a safe manner at all times. Safe

conduct includes adherence to all institutional ES&H policies and procedures as a condition of employment. The responsibility and accountability of ES&H is written in the personnel position description of all staff and is part of the annual employee performance appraisal process.

3.0 ES&H (Safety) Committee

The Division will maintain a Safety Committee, consisting of a chair representing the Division Director, and at least one representative from each Division group or department. ES&H Committee membership is listed in Appendix IV. Committee members will communicate ES&H issues raised at the group level to the Committee. Committee members will report on committee activities back to their respective groups and track sufficiency of any ES&H support. Committee attendance and participation will be recorded in the minutes, which will be distributed to all division staff through group leaders and group Committee members.

The Safety Committee will:

1. Meet monthly.
2. Maintain and track implementation of the Division ISM Plan.
3. Review and analyze ES&H reports and data pertaining to Division performance.
4. Promote ES&H awareness and training.
5. Disseminate lessons learned and other appropriate feedback and continuous improvement mechanisms.
6. Conduct routine inspections of all Division space. Findings and corrective actions arising from self-assessment and other reviews will be tracked to resolution in LCATS.
7. Advise the Division Director on ES&H issues.
8. Quarterly, develop one safety-related presentation and distribute for use at group safety meetings.

Annually, the Safety Committee will prepare a self-assessment report for the Division Director that evaluates the efficacy of the Division ISM Plan. The report will assess the Division's performance in meeting the Lab's self-assessment performance criteria.

4.0 Accident Review Board

The Division has created an accident review board consisting of the Division Director, Division Deputy, Health Services Group representative, Division EH&S Liaison, and Division Safety Coordinator. The board reviews each DOE recordable injury and other significant accidents and injuries to Division staff. Each injured employee and the responsible supervisor discuss the event with the accident review board. The board considers the causes of the accident and future measures that will enable safe job performance. The board also tracks implementation of corrective actions. When appropriate, lessons learned and other feedback mechanisms are communicated to the Division Safety Committee and Division staff.

5.0 Scope of Work Authorized

5.1 General.

The primary objective of the Environment, Health and Safety (EH&S) Division is to protect workers, the public, and our environment by providing professional and technical expertise, follow-on services, and integrated ES&H policy to the Lab's research and support programs. The EH&S Division supports and acts as a partner with line management as it meets direct responsibilities to ensure that protection of workers, the public, and the environment is integrated into the primary research and support functions of each division or unit. Of equal importance, the EH&S Division supports and provides expertise directly to each Lab worker who seeks ES&H advice and help, or who voices a concern. The Environment, Health and Safety Division Charter (Appendix I) defines the scope of work for all EH&S personnel (including contractors).

The Lab-wide Hazards, Equipment, Authorizations and Review (HEAR) database lists the workplace hazards intrinsic to the activities being performed by Division personnel. These activities are summarized in Appendix II.

5.2 Work Requiring Specific Approval.

Prior to commencing work, Division group leaders will prepare EH&S documentation and obtain required authorizations for potentially hazardous or regulated work using the guidance specified in Chapter 6 of PUB-3000. Current EH&S Division work authorizations are listed in Appendix III. Group leaders are responsible for the annual review of authorizations within their jurisdiction.

Building 85, the Hazardous Waste Handling Facility (HWHF), operates under a Part B permit. The HWHF safety analysis is documented in the Final Safety Analysis Document (FSAD), which cites Operational Safety Requirements (OSR's). The OSR's define the operating safety envelope for the facility. The Waste Management Group is responsible for operating the facility in accordance with its OSR's.

The HWHF, Building 70 room 147 (Pit Room), and Building 75C (calibration facility) are categorized as Radiological Facilities under requirements of 10 CFR 830.

The Division self-authorizes work when hazards are below authorization thresholds through its work procedures. Throughout the Division, specific safety concerns and hazards are identified and controls (engineering and / or administrative) appropriate to the hazard and tailored to the work are described in the work procedures.

6.0 Qualification and Training

Division supervisors determine the requisite qualifications for all their employees, students, contractors, guests, and visitors to function safely. Supervisors document that staff possesses these qualifications. Qualifications include skills, certifiable work experience, knowledge, training and certifications required by law or by Laboratory policy. They may be documented in any manner chosen by Division

supervisors provided a copy is placed in the employees' personnel file. Group leaders review JHQs annually and when staff job assignments change to assure JHQs are current and all required training is complete or planned for completion. The training plan will be documented in each employee's performance review and development process (PRD). Employees' ES&H training profiles will be reviewed annually as part of their PRD.

Some training is very specialized and driven by hazards of the work and / or DOE requirements. Examples are Radiological Control / Radiation Technicians training to meet requirements of 10 CFR 835 and Hazardous Waste Workers training to meet requirements of 29 CFR 1910.120. Until such qualifications are established and documented, individuals are only allowed to work under the supervision of a qualified employee.

Staff qualifications and training are reviewed as part of the self-assessment program to ensure that skills and talents are commensurate with the technical needs and workplace hazards.

6.1 Supervisor Training

1. All division supervisors are required to complete EHS020, ES&H for Supervisors.

6.2 Ergonomic Training

1. All division employees are required to complete EHS060, Ergonomics for Computer Users.
2. Employees that use a computer for more than an average of four hours per day to are required to complete EHS068, Ergonomic Workstation Evaluation.
3. Employees that perform bending and/or lifting activities are required to complete EHS062, Move Smart training.

7.0 Resource Allocation

Division supervisors will allocate appropriate resources to address ES&H concerns in all programmatically and overhead funded activities.

8.0 EH&S resources

To support the implementation of the Division ISM Plan, the following internal resources are made available:

ES&H Discipline	FTE
Admin. Services/ Matrixed staff	0.10
Environmental Services	0.20
Health Services	0.10
Industrial Hygiene	0.10
Occupational Safety	0.10
Radiation Protection	0.20

Security & Emergency Ops	0.10
Waste Management	0.10
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TOTAL	1.00
EH&S Division Liaison	0.10
Safety Coordinator	0.50
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EH&S Division Total	1.60

Appendix I

EH&S CHARTER

The primary objective of the Environment, Health and Safety (EH&S) Division is to protect workers, the public, and our environment by providing professional and technical expertise, follow-on services, and integrated ES&H policy to the Lab's research and support programs.

- The EH&S Division supports and acts as a partner with line management as it meets direct responsibilities to ensure that protection of workers, the public, and the environment is integrated into the primary research and support functions of each division or unit.
- The EH&S Division supports and provides expertise directly to each Lab worker who seeks ES&H advice, help, or voices a concern.

In carrying out its primary mission, the Division is committed to six basic objectives:

- Provide employees with a safe workplace.
- Design and operate facilities and research activities to minimize adverse impact on public health and the environment.
- Produce and use only materials that can be disposed of safely and will minimize waste.
- Promptly communicate to affected persons the known hazards of our activities and the related methods necessary for safety and health protection.
- Use available technology, engineered safeguards, and responsible science to mitigate all significant risks arising from its research and related activities.
- Train and develop staff to meet the commitments to a safe workplace and minimal adverse impact on public health and the environment.

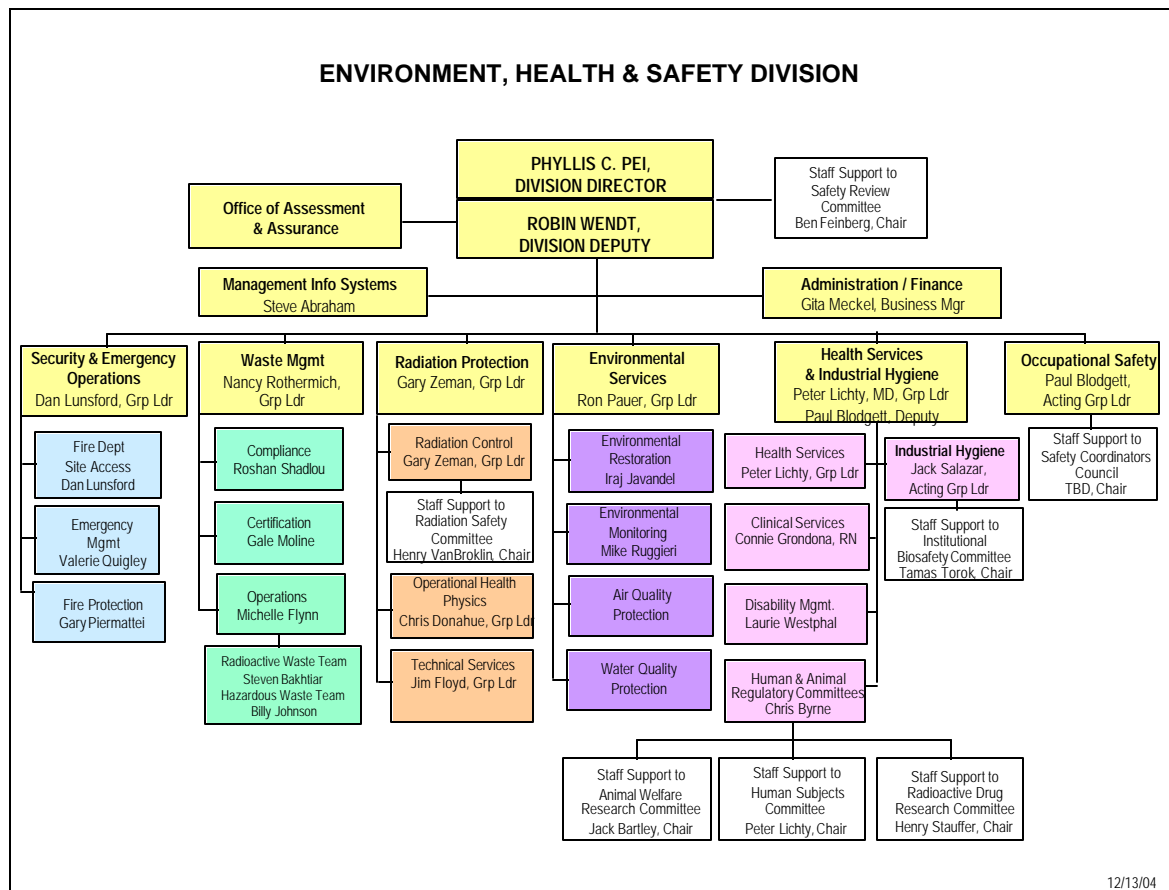
Organization and Administrative Responsibilities and Authority

The EH&S Division is organized into six functional areas: Security & Emergency Operations, Waste Management, Radiation Protection, Environmental Services, Health Services & Industrial Hygiene, and Occupational Safety. Security & Emergency Services includes the Fire Department. Radiation Protection includes Radiation Control, Operational Health Physics, and Technical Services. Environmental Services includes Environmental Restoration. Group leaders of the six functional areas report directly to the Division Director.

The group leaders are responsible for managing their organizations; including planning, staffing, and budgeting; and for developing and implementing Laboratory policies and procedures in their functional areas. The Division Director and group leaders represent the division on matters of major significance to the success of the Laboratory to internal and external organizations and individuals.

To enhance service, EH&S Division Liaisons are designated for each Laboratory organization (see Getting Help from the Environment, Health & Safety Division at <http://www-ehs.lbl.gov/html/ehshelp.htm>). These individuals are considered points of contact between a customer division (typically via Division Safety

Coordinator) and the EH&S Division. They function as troubleshooters, facilitators and problem solvers. Support services include: providing technical consultation and responsive customer service, partnering with customers to implement cost-effective injury and illness prevention/loss control programs, assisting line management with Division ES&H (Safety) Plans, and providing quarterly ES&H briefings to customer division management. This relationship does not preclude any Laboratory employee from directly approaching an EH&S professional/subject matter expert (see Getting Help from the Environment, Health and Safety Division) to address a particular issue or need.



Appendix II

EH&S Division Work Activities and Hazard Levels

Work activity hazards for each Division space are appraised as being high, medium or low level. Based on the annual line management review of work activities, the division has no high level hazards associated with any work. The Divisions work hazard levels are summarized in the table below:

Location	Work Activity	Hazard Level
B14	Environmental Restoration / Offices	Low
B17	Carpentry and machine shops/ Offices/ Computer server/ Storage	Low
B26 – lower floor	TSG Lab / Offices	Low
B26 – upper floor	Medical Facility	Low
B48 Fire Operations	Fire department / emergency services	Low
B51	Excess Facilities/ Radioactive inventory management/ Offices/ Training Room	Low
B65	Site access offices	Low
B70-147/ 147A	Office/ Radioactive material storage	Medium*
B70A-1129/ 1145	Material characterization	Low
B75	TSG dosimetry lab/ TSG radioisotope lab/ Former NTLF labs	Medium*
B75A, 75C	TSG calibration labs	Medium*
75B	Operational Health Physics / Radiation Control Manager offices	Low
B75D	Sample preparation and equipment storage/ Radioactive sealed source storage/ Radioactive transportation storage	Low
B76- 135	Radiological sample counting	Low
B85	Waste Management	Medium*
B85B	Environmental Services and Waste Management office building	Low
B90 basement, trailers	EH&S professional offices	Low

Location	Work Activity	Hazard Level
B90-1140	Division Office/ Administrative	Low
Environmental Services field sites	Environmental sampling and restoration activities	Low
Laboratory gate access structures	Site access	Low

* Radiological Facility classification per DOE Order 5481.1b hazard categorization

Appendix III – Authorizations

The current EH&S Division Authorizations are listed below:

Authorization	EH&S Group	Type	Facility	Responsible Person
State (NPDES) Storm Water Permit	ESG	Storm water discharges	Site-wide	G. Lackner
State (NPDES) Construction Storm Water Permit	ESG	Storm water discharges	Molecular Foundry Construction Site	G. Lackner
EBMUD Permit	ESG	Wastewater discharges	Site-wide	G. Lackner
EBMUD Permit	ESG/ ERP	Groundwater treatment discharges	Site-wide	I. Javandel
BAAQMD Permit	ESG/ ERP	Soil vapor treatment	6, 7, 53/58 areas	I. Javandel
DTSC Part B Permit	Waste Mgmt	Hazardous and mixed waste storage and treatment permit	85	R. Shadlou
SAD	TSG	Calibration facility	75C	J. Floyd
SAD	RPG	Pit Room storage	70-147	G. Zeman
FSAD	Waste Mgmt	Safety analysis document	85	R. Shadlou
AHD 2073	Waste Mgmt	WM Procedure 852	85	N. Rothermich
GLA 405	Waste Mgmt	Radioactive sources	85	M. Flynn
GLA 415	OHP	Radioactive source	75B-116	C. Donahue
L009	ESG	Drain water sampling	75-131	L. Wahl
L011	ESG	Stack Drain Water	75 Hillside Stack	L. Wahl
RWA 1009	TSG	Analytical lab	26, 76	J. Floyd
RWA 1092	OHP	Radioactive material transportation office	75, vehicles	G. Zeman
RWA 1122	TSG	Pit Room radioactive material storage	70-147, 147A	G. Zeman

Authorization	EH&S Group	Type	Facility	Responsible Person
RWA 1134	TSG	Legacy radioactive material handling	70-147, 70A-1129	I. AlMahamid
RWA 1144	OHP	Tritium contaminated equipment storage	75-103, 107, locker outside 103	G. Zeman
RWA 1149	TSG	HWHF routine work	85	J. Floyd
SSA 104	ESG	Tritium monitor calibration source	75D	L. Wahl
SSA 132	OHP	Analytical instruments and calibration sources	6-LKR25, 75B-127	B. Fairchild
SSA 202	OHP	Sealed source storage	75D-102	D. Banghart
SSA 205	TSG	Calibration facility	75, 75A	J. Floyd
SSA 207	OHP	Sealed source storage	75-123	M. DuPray
SAA	EH&S Division	Waste storage	26, 51, 70, 75, 76, 85, 90	various
WAA	Waste Mgmt	Waste storage	85, 51, as needed	M. Flynn M. Lasartemay
MWSAA	TSG/ Waste Mgmt	Mixed waste storage	26, 76, 85	J. Floyd N. Rothermich
RWCA	RPG/Waste Mgmt	Radioactive waste	26, 51, 70A, 75, 85	various
RWP 03-015	OHP	Legacy sealed source characterization	75D-102	R. Fairchild
RWP 04-001	OHP	Radiological scooping surveys	Site wide	C. Donahue
RWP 04-002	Waste Mgmt	Legacy waste characterization and processing	85-MW6, RW2	R. Shadlou
RWP 04-006	RPG	Legacy material characterization and storage	71 Cave A, 75A-101	G. Zeman

AHD = Activity Hazard Document
 BAAQMD = Bay Area Air Quality Management District
 DTSC = Department of Toxic Substances Control

EBMUD = East Bay Municipal Utility District
FSAD = Final Safety Analysis Document
GLA = General License Agreement
MWSAA = Mixed Waste Satellite Accumulation Area
NPDES = National Pollutant Discharge Elimination System
RWCA = Radioactive Waste Collection Area
RWA = Radiological Work Authorization
RWP = Radiological Work Project
SAD = Safety Analysis Document
SSA = Sealed Source Authorization
WAA = Waste Accumulation Area

ERP = Environmental Restoration Program
ESG = Environmental Services Group
OHP = Operational Health Physics
RPG = Radiation Protection Group
TSG = Technical Services Group

Appendix IV

EH&S Division Safety Committee

NAME	GROUP
Larry McLouth	Committee Chair Industrial Hygiene
Dianna Bolt	Health Services
John Chernowski	EH&S Safety Coordinator/ Division Office
James Floyd	Radiation Protection Group/ TSG
John Jelinski	Environmental Services Group
Preston Jordan	ESG/ Environmental Restoration Program
Maram Kassis	Waste Management
Matt Kotowski	EH&S Division Liaison/ Occupational Safety
Valerie Quigley	Security & Emergency Operations
Ana Tully	Administrative Services
John Van Wart	RPG/ Operational Health Physics